The M.E.B. – Ticket Vending Machine for Public Transport has the following characteristics:

- Issues printed tickets with high/low coercivity magnetic ISO code.
- Capacity of two fan fold ticket containers, each of 2,000 tickets.
- Payment can be made by coin or banknote, all change is given in coins.
- Credit, Corporate cards, magnetic or microchip cards can be used for payment.
- Passive security measures.
- Active and passive security features.
- Remote access, maintenance and control procedure management.
- Double and separate remote control for technical and administrative management and security.
- Integrated video-surveillance and video-recording.
- Ergonomic and simple use.
- Personalised front panel.

Passive security measures
- 3mm thick AISI 304 steel cabinet with non-protruding access door and reinforced internal hinges.
- Internal cash compartments, hoppers and strongboxes, protected with locks.
- Magnetic and seismic sensors on outer and inner doors.
- Anti-tampering mechanisms at ticket and change containers.
- Anti-vandal money in-take slot mechanism.

Active security measures
- Self powered alarm system with two separate zones (external zone and "tamper" zone).
- Self powered protected internal alarm siren and anti-vandalism flashing lights.
- Colour anti-vandalism camera for operator recognition.
- Integrated 4 input video-registration system records on local Mpeg4 hard disk memory and network video stream.
- Audio-video surveillance function.
- Contactless 125KHz UNIQUE card reader for operator access backed up by PIN codes.
- Motorised locking system for opening access door commanded from the MEB integrated alarm centre.

Technical information
- Safety cabinet made of 3mm anti-rust AISI 304 steel panels with anti-theft, anti-tamper and anti-vandal protection.
- Support made of tubes. Can be installed as stand alone, wall mounted, individually or in groups. Internally located assemblage points.
- Available with cover accessory for outdoor installation.
- Dimensions (without supports): height 105 cm, width 105 cm, depth 60 cm, approximate weight 260 kg.
- Industrial computer with 80Gb Double Hard Disk (RAID 1) and CPU ≥ Pentium IV 2.8GHZ.
- LCD TFT 15” industrial quality display, luminosity ≥ 250 cd/m2, contrast ≥350:1, resolution 1,024 x 768, vertical/horizontal visualisation angle ≥70º, anti-breaking and anti-reflection protection.
- High resistance electro-mechanical anti-vandal keyboard with individually replaceable buttons.
- POS device in conformity with micro-circuit standards and PCI PED, 16 button keyboard.
- Banknote slot with four way banknote insertion recognition, highly reliable anti-counterfeiting system, anti-fishing function and operation cancellation refund cash for up to 15 banknotes.
- Banknote container with self-closing security mechanism for up to 1,000 banknotes.
- 4-way coin sorter able to detect the alloy, diameter and thickness of the coin inserted.
- Coin hopper for 600 to 1,000 coins of 3 different cones, of which two with a recycle system.
- Coin container for up to 3,500 coins with self closing security mechanism.
- Printing module and magnetic coding with direct thermal printing up to 100 mm/s, ISO selectable magnetic encoder, high/low coercivity, two fan folded or two ticket roles.
- 125 KHz UNIQUE card reader for operator recognition.
- Service printer with a resolution of 203 dpi (8 dot/mm) 24/40 columns on thermal paper from 55 to 70 ge/m2, width 57.2.
- Anti break-in system with double magnetic sensors on the main door locking mechanism, a seismic sensor, five double sensors for the cash boxes, a self powered siren, a rechargeable battery for power, sensor and alarm protection mechanisms.
- 220 Vac 50Hz UPS to conclude in-progress operations and guide shutdown procedures.
- ADSL modem with 4 way Router.
- Operates at temperatures from –20°C to +50°C and with up to 95% humidity.
Maintenance interface
- Intuitive graphic interface of all constituent elements of the machine with status readings of all the functional elements.
- Device tests, including intake/payout coin mechanisms, banknote acceptance, Credit Card connections, alarm sirens, flashing lights and audio.
- Ticket issuing test, also for substitution/recharge of ticket storage, issuance from pre-chosen ticket source, print and codification tests.
- Auto-diagnosis and automatic management of alarm sirens, including empty ticket supply container alert, and technical alarms.
- “Shutdown” functions to close software safely.
- Operator identification via contactless cards
- “On-line” authentication procedure with remote audio/video control and “Off-line” with on site control.
- Prints out a log of all activities.
- Remote up-dating of software and firmware.
- Access limited to the internal technical devices.

User interface
- Guide by LCD TFT 15” display with four buttons on each side, like an ATM.
- Separately located “cancel” button
- Multi language selection.
- Easy to use guided ticket selection
- Interactive updating of the admissible banknote values, based on the ticket price and the change in coins.
- Choice of payment: coins, banknotes, bank cards and Corporate cards (magnetic, microchip, contactless)
- Option to cancel the operation and refund the money which has already been inserted.
- Change given in coins only
- Business card recharge function
- Credit card payment receipt
- Issuance of credit note in case of lack of available coins for correct change.

Cash management interface
- Intuitive graphic interface for information on the levels of the cash present in the containers and hoppers
- Operator profile identification through personalised contactless cards
- “On-line” authentication procedure through remote audio/video control and “Off-line” with on-site control
- Guided procedures for cash refill and drawing
- Access to money management areas (strong boxes and hoppers) reserved and protected by locking systems and sensors connected to a central alarm.
- End of shift printout of sold tickets and all cash movements

Remote video management
The MEBs can be completely monitored from remote positions and respond to two control servers with different roles:
- Supervisor for management and technical control: able to see the status of the machines, alarms and levels of tickets and cash in their relative containers.
- Supervisor for security control: able to manage the MEB access procedures and affect video surveillance of the machines and the surrounding areas.

TPL Manager services
The MEBs have been manufactured to guarantee maximum reliability and efficiency, with the following special devices:
- Anti-tampering measures to limit machine down-time due to minor tampering
- Anti-vandal measures to protect the MEBs from forcing and theft.
- Monitoring and audio video surveillance.

Service to the public
- The client, guided by the messages and the video display, selects the ticket by using an ATM type interface system
- The client can easily and quickly select the type of ticket required, the number of tickets desired, or cancel the entire operation at any time.
- The multi-language feature offers interactions in English, German, French, Italian and Spanish. Other languages are available on customer request.
- Cash payment for the ticket/s can be made with either banknotes or coins.
- The amount and type of the bank notes and coins are calculated for each transaction and shown on the display based on the value of the ticket/s requested and the maximum amount of change that can be given.
- Alternatively clients can also pay with bank credit cards. The transaction devices are in conformity with Microcircuit regulations and the bank circuit PCI PED.
- The machines can also recharge transport cards by transferring the value of the money inserted in them onto the card.